Expanding Wildlife Conservation Education May 23, 2005

Note: The following summary of the results of this workshop reflects the collective discussion and general conclusions of the workshop participants and does not necessarily reflect the views of the Department of Fish and Game, the Wildlife Diversity Project at UC Davis, or any individual participant.

The Issue

Wildlife conservation education seeks to repair the disconnect between people and nature. The goals of wildlife conservation education in California include improving the stewardship of wildlife and their habitat; promoting and facilitating wildlife conservation awareness, appreciation, and knowledge among youth and adults; developing an informed public that understands cause and effect of human activities on wildlife and their habitats; and providing statewide universal access to wildlife conservation education for youth from kindergarten to 12th grade.

Achieving these goals requires increasing the quantity and quality of conservation education programs available to youth and adults and providing sustainable funding for those programs. Pooling of resources, coordinating wildlife education delivery systems, and finding ways to help teachers bring wildlife education into their curricula are necessary parts of breaking down barriers to wildlife education in formal education. In addition, wildlife conservation education must address the misconceptions and lack of correct information regarding science and wildlife. It must also address cultural and demographic changes in the state if it is to be relevant to an urban and increasingly diverse population.

Improving wildlife conservation education throughout the state will create a population that is more informed, engaged, and involved in issues of wildlife conservation and environmental sustainability. This population will be better able to understand and make decisions about the complex interactions among humans, wildlife, and the environment.

Current Situation

Wildlife education has a variety of obstacles to overcome if it is to be broadly available to K-12 youth, as well as to adults.

Several barriers exist to delivering wildlife education in the formal education setting.

There is a shortage of trained, knowledgeable teachers who are willing to teach wildlife education. Teachers typically are overcommitted with their existing work and so may not be

eager to teach another program. Many teachers don't see outdoor experiences as relevant, don't understand the importance of wildlife education, and do not know that it is compatible with state standards. In addition, the California content standards above 7th grade don't encourage wildlife education.

The wildlife-education delivery system could be better coordinated.

A variety of outdoor education programs are available to children, youth, and adults—Project WILD and Project Learning Tree are examples—yet only a small percentage of the state's school-aged children are reached. Some programs have expanded their material to reach a broader audience, including curricula for pre-K and college students.

Agency resources are not efficiently utilized to facilitate wildlife education for a broader audience. Moreover, agencies could improve partnering with the staff of nongovernmental organizations and recreational leaders, who are well-suited to provide nonformal wildlife education.

Misconceptions and lack of correct information concerning science and wildlife abound.

Television is a dominant force in wildlife education, and its focus on single animals or single species ignores landscape concepts and sends the wrong message on wildlife conservation. In school, the testing regime discourages complex thought, and without an adequate knowledge base to build on, exploring more complex ideas is difficult. There is also a growing distrust of science, and government agencies shy away from controversial topics. Linking current research with the solutions to environmental problems will demonstrate the value of sound science.

The public and nature are largely disconnected.

Increasingly, kids are not connected to outdoors and wildlife, whether at home or at school. There is also a disconnect between where students are taught about nature and where they live. Wildlife education should be matched to the setting where people live, not just to wild places. A connection is needed between the day-to-day lives of students and wildlife conservation if we expect students to value wildlife and the environment. Wildlife education programs need problem-solving dilemmas that help students understand the connection between wildlife and themselves. Connecting students to wildlife research-and-monitoring projects in the field and lab and broadly engaging community partnerships to schools for community service—learning partnerships will provide students with real-life experiences.

Cultural and demographic differences and changes require different approaches.

The demographics of the state continue to be more diverse and more urban. Wildlife conservation educators must find a way to reach all kids in a population that is culturally and geographically diverse. Different ethnic groups have different views of wildlife. Unfortunately, there is a distinct lack of cultural diversity among providers, which inhibits the incorporation of wildlife conservation values into all segments of the population. Materials in Spanish and other languages are also needed.

Funding is generally limited for wildlife education.

It is especially difficult to find funding for field trips and transportation. Access to field trip sites can also be difficult. State and federal agencies are not strongly committed to wildlife education, thus it is not prioritized for funding.

Needs Identified

Wildlife conservation educators have an array of challenges to overcome if they are to successfully train the next generation of engaged and informed decision-makers about the environment in which they live. Reconnecting people with nature and providing them with a sense of place, regardless of where they live, is the key challenge but one that can be met. Progress must be made in the following areas to advance wildlife conservation education broadly in the state:

Break down barriers to wildlife education in formal education.

- Ensure that wildlife education remains in the model curriculum (EEI) and in the science content standards test.
- Create an effective marketing approach to inform teachers of free wildlife education training and the California Regional Environmental Education Community (CREEC), and increase travel funding for students.

Pool and coordinate resources into a wildlife education delivery system.

- Develop funding sources for needed programs.
- Establish dedicated contacts within agencies for wildlife education, perhaps through CREEC.
- Create a point position for statewide wildlife education coordination that is connected to the field.

- Develop opportunities for staff from different programs and agencies to meet at conferences and social functions to learn what each is doing and to network on potential opportunities.
- Inventory wildlife education materials and resources, including a gap analysis, and then fill the gap.

Correct misconceptions about science and wildlife education.

- Provide the legislature and media with wildlife mini-trainings.
- Encourage media advocacy among students to address issues, and encourage teachers to use media in critical-thinking activities.
- Develop a "wildlife misconception and myths" Web site/handbook.
- Promote the concept of peer-reviewed science; e.g., via strategic-message campaign and training.
- CREEC should develop awards for the 10-worst and 10-best environmental messages.
- Support efforts by the Association of Environmental and Outdoor Education, the California Science Teachers Association, California Building a Presence for Science, and others to improve training of teachers, naturalists, non-formal educators, et al.

Reconnect people to nature.

- Help children understand their connection with the natural landscape of today and before the onset of human settlement by promoting place-based learning and comparing the built environment to the natural environment.
- Ensure that all students are given an opportunity to participate in outdoor education, a concept that should be part of a "Children's Outdoor Bill of Rights."
- Connect with the school yard, the Internet, and other opportunities, and train teachers
 to bring the outdoors inside.
- Encourage city redevelopment projects to include parks, open space, and community gardens to give children exposure to urban wildlife.
- Promote connections to environmental justice issues.

Address cultural and demographic differences and population changes.

- Create outreach programs for specific communities with the California Association of Bilingual Educators and train recreational leaders as nonformal educators.
- Educate real estate agencies on the natural environment, economic values of wildlife, living with bears and mountain lions, etc., so that they can provide accurate information to clients.

• Develop a culturally diverse docent- and outdoor-educators pool trained in wildlife education.

Enhance funding for wildlife conservation education.

- Support state bond funding for capital costs of education infrastructure at nature centers, wildlife reserves, open space areas and parks.
- Lobby Congress to amend the State Wildlife Grants program to authorize funding for wildlife conservation education.
- Include wildlife education as part of funding for projects in transportation, habitat restoration, mitigation, water consumption, and other well-funded, environmentally based projects.
- Create incentive funds for schools and others to provide wildlife education.

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